

Serial No.: 10/826,278
Docket No.: 101-1025
Amendment dated August 1, 2007
Reply to the Office Action of May 17, 2007

REMARKS

Introduction

Applicant notes with appreciation the Examiner's indication that claims 4-13 would be allowable if rewritten in independent form, and that claims 19-21 are allowed in their present form. Applicant also notes with appreciation the Examiner's indication that each of the references cited in the Information Disclosure Statement of April 19, 2004 have been considered.

Upon entry of the foregoing amendment, claims 1-26 are pending in the application. Claims 1, 14, 22 and 23 have been amended and claims 24-26 have been newly added. No new matter is being presented. In view of the following remarks, reconsideration and allowance of all the pending claims are requested.

Rejection under 35 USC §112

Claims 22 and 23 have been rejected under 35 U.S.C. §112 , second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Among the amendments to the claims are amendments to the language of claims 22 and 23 in order to more clearly recite features of these claims and to address the Examiner's concerns. These claims are now unambiguous in their respective recitations.

Rejection under 35 USC §102

Claims 1-2, 14-15, 17-18 and 22-23 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 7,081,891 to Schermerhorn (hereinafter "Schermerhorn"). Applicant respectfully requests favorable reconsideration of these claims for at least the reasons discussed below.

Claim 1

In the Official Action, the Examiner cites Schermerhorn as allegedly teaching a single-sided driver that "establishes current flow paths to generate predetermined driving waveforms required for both X and Y axes electrodes according to predetermined switching sequences to drive the display panel." See Detailed Action, page 3, beginning at line 10. The Examiner then

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takes the position that "it is inherent that the PDP (14) shown in Fig. 4 has X and Y electrodes." However, it is respectfully submitted that the Examiner's description of switching functions allegedly disclosed in Schermerhorn (see pages 3 and 4 of the Detailed Action) and a statement of allegedly inherent structure does not sufficiently show *prima facie* anticipation of a system that "establishes current flow paths to generate predetermined driving waveforms required for both X and Y axes electrodes," as the Examiner contends.

A careful analysis of Schermerhorn reveals that the circuit of FIG. 4, which was cited by the Examiner, can only control a voltage at the single input port A of the PDP; there is no disclosure in Schermerhorn of a single-sided driver controlling input to individual electrodes. Moreover, the Schermerhorn system of FIG. 4 appears to provide input on the single input port A based on a circuit model of the interior structure of the PDP and an input signal response fed back to a controller, which can be adjusted to meet requirements of the model. The model of the PDP in Schermerhorn, i.e., the structure interior to the dotted line at 14 in FIG. 4, assumes a connection to ground at one of its input ports, such that controlling the electrodes separately is precluded. Nowhere is it disclosed or taught in Schermerhorn that a single-sided driver circuit has "separate current flow paths coupled to each of X and Y axes electrodes of the display panel" to "[establish] current in the current flow paths to generate respective predetermined driving voltage waveforms on the X and Y axes electrodes," as presently recited in independent claim 1.

As the Examiner is aware, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as contained in the...claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Moreover, "The elements must be arranged as required by the claim..." In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). Further, if the Examiner is relying on the theory of inherency in any manner, "the Examiner must provide a technical basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990; emphasis in original). Thus, for at least the reason that Schermerhorn fails to disclose or teach each and every element in

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the arrangement recited in independent claim 1, such as, for example, “[establishing] current in the current flow paths to generate respective predetermined driving voltage waveforms on the X and Y axes electrodes,” the reference cannot anticipate this claim. Accordingly, reconsideration and allowance of independent claim 1 are earnestly solicited.

Claim 2

Dependent claim 2 incorporates all of the elements of independent claim 1. For at least the reason that Schermerhorn fails to disclose or teach all of the elements in the arrangement recited in independent claim 1, the reference cannot anticipate the recitations of dependent claim 2. Accordingly, reconsideration of the rejection and allowance of dependent claim 2 are earnestly solicited.

Claim 14

As discussed above with regard to independent claim 1, it is clear that Schermerhorn fails to teach or disclose “[establishing] current flow paths to generate respective predetermined driver voltage waveforms at X and Y axes electrodes according to predetermined switching sequences,” as presently recited in independent claim 14, since Schermerhorn’s alleged single-sided driver apparently applies a voltage at the single input port A under assumptions of modeled behavior of the PDP as a whole. Thus, since Schermerhorn fails to disclose or teach respective waveforms applied on the X and Y electrodes, as discussed above with regard to independent claim 1, the reference cannot anticipate independent claim 14. Accordingly, for at least this reason, favorable reconsideration of this claim is respectfully requested.

Additionally, however, it is to be observed that Schermerhorn fails to disclose or teach a “voltage across the X and Y electrodes [that] alternates in polarity with respect to a reference voltage to drive the display panel,” as presently recited in independent claim 14. There appears to be a single polarity voltage discussed in the reference with regard to FIGS. 5 and 9, but the limitations of Schermerhorn’s alleged single-sided driver imposed by its construction prohibit such a driver to operate in the same manner as Applicant’s single-sided driver, which is designed and constructed with “circuit elements including energy accumulation elements and switching elements that establish current flow paths to generate respective predetermined driver voltage waveforms at X and Y axes electrodes according to predetermined switching sequences so that a resulting voltage across the X and Y electrodes alternates in polarity with respect to a

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reference voltage to drive the display panel,” as presently recited in independent claim 14. Clearly, a “voltage across the X and Y electrodes [that] alternates in polarity” is not disclosed, taught, or contemplated by the reference, and thus the reference cannot anticipate the subject claim.

For at least the reason that Schermerhorn fails to disclose or teach all of the operations recited in independent claim 14, the reference cannot anticipate this claim. Accordingly, reconsideration of the rejection and allowance of independent claim 14 are earnestly solicited.

Claims 15, 17 and 18

Dependent claims 15, 17 and 18 incorporate all of the operations and limitations of independent claim 14. For at least the reason that Schermerhorn fails to disclose or teach all of the operations presently recited in independent claim 14, the reference cannot anticipate the recitations of dependent claims 15, 17 and 18. Accordingly, reconsideration of the rejections and allowance of dependent claims 15, 17 and 18 are earnestly solicited.

Claim 22

For reasons already discussed above with regard to claims 1 and 14, Schermerhorn fails to disclose, teach or contemplate “switching current between current flow paths to generate predetermined driving voltage waveforms alternating in polarity with respect to a reference voltage across X and Y axes electrodes according to predetermined switching sequences to drive the display panel,” as presently recited in independent claim 22. For at least the reason that all of the operations of claim 22 are not disclosed or taught by Schermerhorn, the reference cannot anticipate the subject claim. Accordingly, reconsideration of the rejection and allowance of the independent claim 21 are earnestly solicited.

Claim 23

Dependent claim 23 incorporates all of the elements of independent claim 22. For at least the reason that Schermerhorn fails to disclose or teach all of the elements in the arrangement recited in independent claim 22, the reference cannot anticipate the recitations of dependent claim 23. Accordingly, reconsideration of the rejection and allowance of dependent claim 23 are earnestly solicited.

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Rejection under 35 USC §103

Claims 3 and 16 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Schermerhorn. Dependent claim 3 incorporates all of the elements of independent claim 1 and dependent claim 16 incorporates all of the operations of independent claim 14. The Examiner's assertion that a higher value voltage source could be used with Schermerhorn (see page 11 of the Detailed Action) does not overcome the shortcomings of Schermerhorn with regard to independent claims 1 and 14. Thus, for at least the reason that Schermerhorn does not disclose, teach or suggest all of the elements and operations of independent claims 1 and 14, the reference cannot make obvious the dependent claims respectively based thereon. Accordingly, reconsideration of the rejections and allowance of these claims are earnestly solicited.

New Claims

Claims 24-26 have been added. No new matter is being presented and support for the additional claims can be found throughout the specification, such as, for example, in FIGS. 3 and 4, and the corresponding descriptions thereof.

Conclusion

It is respectfully submitted that a full and complete response has been made to the outstanding Office Action and, as such, there being no other objections or rejections, this application is in condition for allowance, and a notice to this effect is earnestly solicited.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided below.

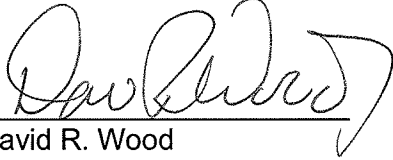
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If any further fees are required in connection with the filing of this amendment, please charge the same to our Deposit Account No. 502827.

Respectfully submitted,

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